REMARKS

Posture

In a first Office action of July 11, 2006, Examiner required restriction to one of two groups of claims. In Response to Restriction Requirement of August 6, 2006, Applicant elected to prosecute the claims in Group I, claims 1-18 and 30-32, with no transversal. In a telephone interview on August 7, 2006, Examiner Dwivedi indicated he intended to group claim 29 with the claims in Group II.

In a second, non-final Office action of August 22, 2006, Examiner rejected claims 17-18 under 35 U.S.C. 101, claims 1-2, 6-18 and 30 under 35 U.S.C. 102(b) as being anticipated by Vermeulen (U.S. PGPUB 200110042171), claims 3-4 under 35 U.S.C. 103(a) as being unpatentable over Vermeulen as applied to claims 1-2, 6-18, and 30 and in view of Carpentier et al. (U.S. PGPUB 200410068652), and claim 5 under 35 U.S.C. 103(a) as being unpatentable over Vermeulen as applied to claims 1-2, 6-18, and 30, and in view of Carpentier as applied to claims 3-4, and further in view of Sekiguchi et al. (U.S. Patent 6,434,553), claim 31 under 35 U.S.C. 103(a) as being unpatentable over Vermeulen as applied to claims 1-2, 6-18, and 30 and in view of Alshab et al. (U.S. PGPUB 200510138081), and claim 32 under 35 U.S.C. 103(a) as being unpatentable over Vermeulen as applied to claims 1-2, 6-18, and 30 and in view of Margolus et al. (U.S. PGPUB 200210038296). In Reply A of November 22, 2006, Applicant canceled claims 3, 4, 8-18 and 31-32, amended claims 1, 5, 6, and 30-32, and added new claims 33-43 to overcome the rejections.

In a third, final Office action of April 6, 2007, Examiner objected to the specification and to claims 5 and 33, rejected claims 1-2, 5-7 and 33-43 under 35 U.S.C. 101, rejected claims 1-2, 5-7, and 33-35 under 35 U.S.C. 103(a) as being unpatentable over Vermeulen in view of Fanning (U.S. Patent 6,742,023), and rejected claims 36-43 under 35 U.S.C. 103(a) as being unpatentable over Vermeulen in view of Rodriguez (U.S. PGPUB 200510090283). In an amendment accompanying a Request for Continued Examination of August 6, 2007, Applicant responsively amended the specification, canceled claims 5, 8, 38 and 42, amended claims 1, 6, 33, 36 and 40 and traversed claims 2, 7, 35, 37, 39, 41, and 43 to overcome the rejections.

Present Office Action

In the present, non-final Office action of September 20, 2007, Examiner indicates that the objections raised in the Office action of April 6, 2007, have been overcome by the applicant's amendments of August 6, 2007.

In addition, independent claims 1, 6, 36, and 40, and their dependent claims, stand rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the amended limitation "presenting an indication of the retrieval to a user" stands rejected as being vague and indefinite in claims 1, 6, 36, and 40. That is, the Office action asserts that it is unclear whether the retrieval indication concerns the hash values or the first resource. And in claim 6, the limitation "wherein the required first resource" stands rejected as having insufficient antecedent basis. Claims 33, 39 and 43 stand rejected under 35 U.S.C. 112, second paragraph, due to incorrect claim dependency numbering.

Claims 1-2, 6-7, 33, and 35 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. PGPUB 2001/0042171 ("Vermeulen") in view of U.S. Patent 6,742,023 ("Fanning"), and further in view of U.S. PGPUB 2004/0172476 ("Chapweske"). Claims 36-37, 39-41, and 43 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Vermeulen in view of U.S. PGPUB 2005/0090283 ("Rodriquez"), and further in view of Chapweske.

Actions Herein

1. Applicant herein above amends claims 1, 6, 33, 36, 39, 40 and 43 to overcome the rejections under 35 U.S.C. 112, second paragraph.

2. Applicant herein traverses the rejections under 35 U.S.C. 103(a) with respect to claims 6, 7 and 35, and herein above amends claims 1, 36, and 40 to more particularly point out patentably distinct features of the invention to even more certainly overcome the rejections under 35 U.S.C. 103(a) of claims 1-2, 33, 36-37, 39-41, and 43.

The present Office action asserts that Chapweske teaches "initiating retrieval of the required first resource from said at least one data processing system comprises: initiating retrieval of the bit sequence of said required first resource in a reverse order relative to the retrieval of said required first resource via the bandwidth-sensitive connection" as recited in claim 1 (prior to the amendments submitted herein). See, for example, pages 8-9 of the present

Office action. The present Office action also asserts that Chapweske teaches similar language of claims 6, 36 and 40. See, for example, claims 36 ("initiating retrieval of the required first resource comprises: initiating retrieval of the bit sequence of said required first resource from the LAN in a reverse order relative to the retrieval of said required first resource from the remote network"). In this regard, the Office action particularly relies upon the teaching of Chapweske, paragraphs 81-85, 97 and 101.

Chapweske teaches that portions of files may be retrieved in parallel and refers to the portions variously as blocks, pieces, data set portions, ranges of bytes (or simply "ranges"), sets of bytes, run lengths, and range sets. See, e.g., Chapweske, paragraph 0012 and 0014 (pieces), 0013 (blocks), 0078 (data set portions), 0081 (range of bytes, set of bytes, run length, range set), 0085-86 (ranges). Chapweske introduces terminology for referring to specific portions of files, including terminology for identifying a portion of a file that is a certain set of bytes at the end of the file. See, e.g., Chapweske, paragraph 0085 (providing an example in which the terminology "20-" is used to identify a set of 20 bytes located at the very end of a file).

Applicant thanks Examiner for the diligent search that has revealed Chapweske and for Examiner's carefully presented analysis of Chapweske. This allows Applicant the opportunity to clearly point out the patentable distinction of the present invention with regard to references carefully revealed and considered by Examiner.

Claims 1, 6, 36, and 40

Applicant has carefully considered the references deemed material by Examiner and concludes that Chapweske teaches that bytes may be retrieved out of order and may specifically include initiating retrieval of a set of bytes at the end of a file concurrently with a set not at the end. See, e.g., Chapweske, paragraph 0097. For at least the following reasons, however, Chapweske does not teach "initiating retrieval of the bit sequence of said required first resource in a reverse order relative to the retrieval of said required first resource via the bandwidth-sensitive connection," as recited in claim 1, nor similar language recited in claims 6, 36, and 40. If Chapweske was teaching that retrieval is initiated for an *entire* file from one source and retrieval is also initiated for the same *entire* file from another source, but in reverse bit sequence order, then why would Chapweske need terminology to facilitate assigning the *last "N-" set* of bytes to a new source (i.e., the terminology that the Office action points to in

Chapweske, paragraph 0085)? That is, since two retrievals according to the arrangement of the present invention are in opposite bit sequential order, and since the retrievals are done responsive to accumulated size of combined file portions equaling the total size of the file (such that the two downloads meet, so to speak, at some non-predetermined location in between the beginning and end of the file), this is not consistent with teaching by Chapweske about determining in advance a specific size of one of the *portions* to be downloaded. Thus, it should be understood that Chapweske does not teach retrieval in opposing bit sequence order as in the present invention, but rather teaches retrieval of an ending portion of a file, which begins at N predetermined bytes from the end of the file (defined by the terminology "N-"), concurrently with initiating retrieval of a beginning portion of the file, where both portions are downloaded in the same bit sequence and the retrieval of the beginning portion is stopped when the accumulated first portion reaches a predetermined byte (N+1 bytes from the end).

Claims 1, 36, and 40

To all the more clearly point out this distinction, Applicant herein above amends claim 1 to state that the method includes "initiating retrieval of *all bits* the bit sequence of said required first resource from said at least one data processing system and initiating retrieval of *all bits* of said required first resource via said bandwidth-sensitive connection, wherein the retrieval of bits of said required first resource from said at least one data processing system is in a reverse bit sequence order relative to the retrieval of bits of said required first resource via the bandwidth-sensitive connection" (emphasis added). (Applicant also herein above correspondingly amends similar language of claims 36 and 40.)

No new matter is added, since the original application provides support. Specifically, the original application states that "According to this embodiment, the bit sequence of a copy of a required resource within a LAN is transmitted to the requestor system in reverse order relative to a copy being transmitted from a remote system." Present application, as published, paragraph 0013. See also, paragraph 0071. From the statement that "a copy of a required resource" is transmitted from within a LAN and "a copy" is transmitted from a remote system, and from the lack of statement that transmission of mere portions are initiated, and from the statement in paragraphs 0013 and 0071 that "file size information" is retrieved rather than specifying or

retrieving sizes of portions, it follows that retrieval of all bits of the resource are initiated for both transmittals.

It should be understood, of course, that the above references to "initiating retrieval of all bits . . . from said at least one data processing system" and "initiating retrieval of all bits . . . via said bandwidth-sensitive connection" do *not* state nor imply that all bits are *ultimately actually retrieved* from the at least one data processing system nor via the bandwidth-sensitive connection, but merely indicates that both the retrievals are *initiated* for the entire set of bits of the file. This is different than Chapweske, which teaches that at least one of the targeted retrievals for a file is initiated for a predetermined set of bytes, where the predetermined set is less than all the bytes of the entire file, and which correspondingly indicates, from an implication of the "N-" terminology, that both file portions are retrieved in the same sequence.

Claims 33, 35, 39 and 43

Indeed, this distinction is still further pointed out by dependent claims 33, 35, 39 and 43. For example, claim 33 states that the method includes "completing the combining responsive to a total number of bits retrieved reaching the indicated size of the first required resource." Claims 35, 39 and 43 have similar language.

The present Office action, however, repeats its assertion that both Fanning and Rodriguez teach this. Applicant respectfully disagrees, as previously explained. The present Office action does not specifically address the arguments previously presented by Applicant regarding the cited passages of Fanning and Rodriguez, other than by setting out the text of the relied upon passages, but then asserting it is understood without reference to those passages, i.e., by common knowledge, i) that reassembly and reordering of a file is accomplished after downloading different portions of the file simultaneously, and ii) that for downloading a 1.0 MB file, 1.0 MB is downloaded.

Applicant respectfully submits it is significant that "completing the combining responsive to a total number of bits retrieved reaching the indicated size of the first required resource" is not directly taught in the references in the specific context of combining concurrently retrieved portions of a file, despite the fact that the Office action considers Fanning, Rodriguez and Chapweske material to the present invention, and that the Office action, therefore, refers to what it considers to be common knowledge as an indirect form of this teaching.

Even taken collectively, the references affirmatively *teach away* from the present invention. See, for example, the above discussion of Chapweske. Neither Fanning nor Rodriguez fit with the above discussed teaching of Chapweske to supply corresponding teaching about "completing the combining responsive to a total number of bits retrieved reaching the indicated size of the first required resource."
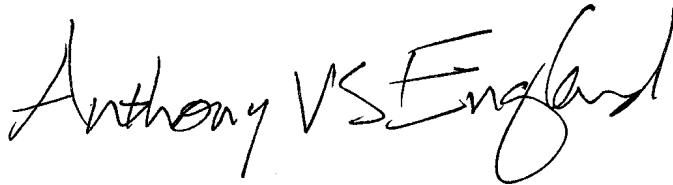
Claims 2, 37, 39 and 41

Claims 2, 37, 39 and 41 are allowable at least because they depend upon respectively allowable independent claims.

REQUESTED ACTION

Applicant submits that the claims as submitted herein are patentably distinct, and hereby requests that Examiner grant allowance and prompt passage of the application to issuance.

Respectfully submitted,

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